

***Ophioglossum pusillum* Raf.**

adder's-tongue

Ophioglossaceae (Adder's Tongue Family)

Status: State Threatened

Rank: G5S1S2

General Description: Roots yellow to tan, up to 15 per plant, <1/16 inch diameter, producing plantlets. Stem upright, to ¾ inch, 1/8 inch in diameter, 1 leaf per stem; trophophore stalk expanding gradually into blade; trophophore blade erect or spreading, usually plane when alive, pale green, dull, mostly oblanceolate to obovate, widest point in the middle, to 4 x 1½ inches, soft herbaceous, base tapering gradually, apex rounded; venation a complex network, with included free veinlets in spaces; sporophores arising at ground level, 2.5-4.5 times length of trophophore; sporangia clusters ¾-1¾ x <1/16-1/8 inch, with 10-40 pairs of sporangia, apex 1/16 inch.

Identification Tips: *O. pusillum* is the only member of the genus occurring in the Pacific Northwest. It can be overlooked because of the superficial resemblance of its leaves to those of monocotyledonous plants (Flora of North America 1993).

Phenology: Can be identified from June through September.

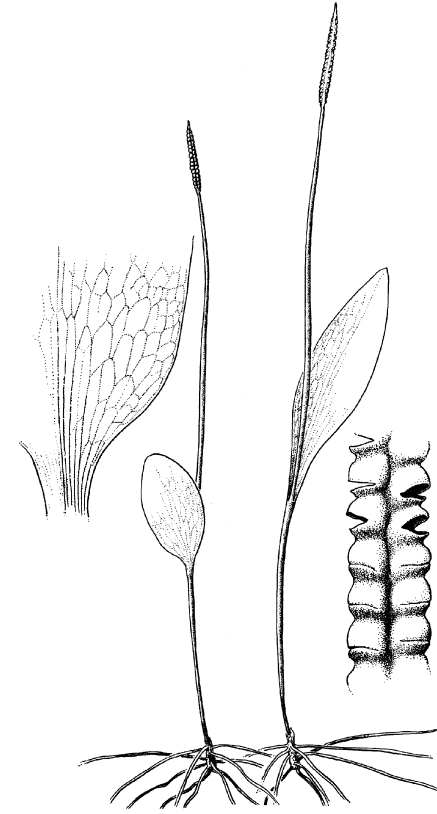
Range: New Brunswick to British Columbia and Alaska south to Virginia, Ohio, Illinois, North Dakota, Montana, and Washington. In WA, the species is currently known from Douglas, Klickitat, San Juan, and Stevens counties. Historically, the species occurred in Kittitas and Mason counties as well. Occurs in the Columbia Basin, Eastern cascades, Olympic Peninsula and Southwest Washington, and Puget Trough physiographic provinces.

Habitat: Terrestrial in pastures, old fields, roadside ditches, and flood plain woods in seasonally wet, rather acid soil. Elevations from 40 to 2300 feet.

Ecology: *O. pusillum* has been found in such diverse sites as bogs, fens, damp sand, pastures, wet meadows, grassy swales, moist woods, rich swamplands, mud creeks, and cedar swamps. Occasionally it occurs on dry, sandy beaches or hillsides and the subterranean gametophyte may be an adaptation to seasonal drying and/or fire.

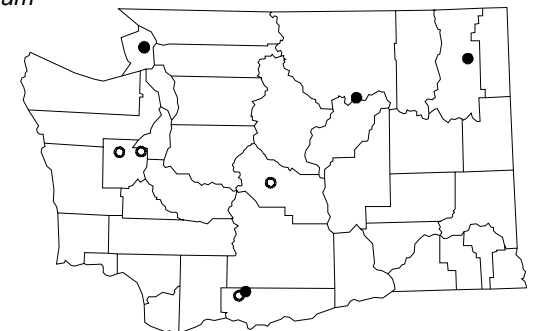
Ophioglossum pusillum

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Known distribution of
Ophioglossum pusillum
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Photo by Steve Wirt

Ophioglossum pusillum

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State Status Comments: There are only several recently known occurrences probably totaling less than 1000 plants.

Inventory Needs: No systematic inventories have been undertaken for this species. Inventory efforts could be aided by training individuals to recognize the species and its habitat.

Threats and Management Concerns: Threats to the species include, grazing, trampling, logging, and any activities which would alter the hydrology of the sites.

Comments: Synonymous with *Ophioglossum vulgatum* L. var. *pseudopodium* (Blake) Farwell.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1969. *Vascular Plants of the Pacific Northwest, Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons*. University of Washington Press, Seattle. 914 pp.

Flora of North America Editorial Committee, eds. 1993. *Flora of North America North of Mexico. Volume 2: Pteridophytes and Gymnosperms*. Treatment of the genus *Ophioglossum* (p. 102-105) by W.H. Wagner and F.S. Wagner. Oxford University Press, New York. 475 pp.

Lellinger, D.B. 1985. *A Field Manual of the Ferns and Fern-Allies of the United States and Canada*. Smithsonian Institution Press. Washington, D.C. 389 pp.



Photo by Katy Beck